

REMARKS/ARGUMENTS

Claim Amendments

The Applicant has amended claims 1, 5-7, 9-15, 17, 19-23, 57-58 and 60, with most of the amendments made to clarify the reading of the claims. Applicant respectfully submits no new matter has been added. Accordingly, claims 1-23 and 56-60 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Examiner Objections - Claims

Claims 23 and 60 were objected to because of informalities. The Applicant appreciates the Examiner's thorough review of the claims. The Applicant has amended the claims as suggested by the Examiner in order to correct the informalities. The Examiner's consideration of the amended claims is respectfully requested.

Response to Amendment

The Applicant appreciates the response to amendment. Most of the amendments in this current response were made to more specifically identify the term proxy execution server, which should actually be proxy execution environment server. The Applicant agrees that a mere concatenated proxy chain, according to the new grounds of rejection, does not appear to show a patentable distinction over the chaining of multiple proxies in Knauerhase. However, the Knauerhase reference appears to concatenate proxies through reformatting the address fields of a request (Knauerhase col 8 line 17-34). The Applicant's invention arranges for concatenating proxy functions that are not complete proxies but rather general-purpose proxy service modules with input and output capability (paragraph 0033, lines 4-5).

Claim Rejections – 35 U.S.C. § 103 (a)

Claims 1-9, 11, 16-23, 56, 58, and 60 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mogul (US Patent Number 6,704,798) in view of Knauerhase

et al. (US Patent Number 6,345,303). The Applicant respectfully traverses the rejection of these claims.

In the Applicant's present invention, proxies are stored in Proxy Repositories and a proxy execution environment server retrieves a required proxy and installs the proxy in the location (a specific proxy path) requested. Along with installing proxies in the proxy chain, the present invention utilizes a "proxy cradle" coupled to the network service points and the proxy chain between service points. The proxy cradle handles proxy-to-proxy communications and manages the network service points. (Figure 3, para. 0033) The present invention, including the proxy cradle, allows for providing a wide range of proxies and consequently, wider server content to terminals having different operating characteristics. If a new terminal requests a particular service from a server and uses different parameters than the last terminal, the server signals the proxy execution environment server to download a different set of proxies to a proxy path between the server and the new terminal. The same service can be supplied to the new terminal, with different parameters, by using a different configuration of proxies. The Applicant also discloses the ability of the server to send requests, in parallel, to a plurality of proxy execution environment servers for specific proxies. The specific proxies may also be installed in parallel in the proxy path. (Page 7, line 2 through page 11, line 12).

In summary, the Applicant's invention provides access to proxy modules that may be combined at the behest of the server. Furthermore, the proxy cradle improves communication by managing the proxy-to-proxy communication between the service points. And because the combination and ability to mix proxies from different sources is adjustable in either concatenated or parallel proxy chains, the flexibility of service is vastly improved.

The Mogul reference discloses server control of transcoding conversion at a proxy or client location. Mogul discloses sending instructions that are executable by a proxy server, or a client, for converting information sent by the server. The server embeds information in a query response that a "representation conversion" uses to convert the information being returned by the server to the client. The server

determines whether to send the response to a proxy server or the client, whichever contains the server specified representation conversion program that is more suitable for display at the client (Col. 8, lines 50-64).

As noted above, the Mogul reference does not disclose the use of a proxy chain. In fact, Mogul discloses using a representation conversion program retrieved from either a server or from the client rather than using a proxy chain. On the other hand the Knauerhase reference is cited for teaching the use of concatenating a plurality of proxies to form a proxy chain. The Applicant agrees with the assertion that Knauerhase discloses a proxy chain. However, the Knauerhase reference fails to supply the limitation of the proxy cradle of the present application that is missing from the Mogul reference. The Applicant respectfully requests the withdrawal of the rejection of claims 1-9, 11, 16-23, 56, 58, and 60.

Claims 6, 20 and 21 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mogul, as applied above, in view of Knauerhase. Mogul is cited for downloading selected proxy modules from proxy repositories and Knauerhase is cited for providing an input network service point, an output network service point and a proxy cradle for handling proxy-to-proxy communications. The Applicant has reviewed the cited portion of Knauerhase and the Applicant finds no reference to either network service points or a proxy cradle. Instead, the cited portion of Knauerhase discusses the use of a technique (i.e., cookies) for indicating that a network proxy has worked on a request. The "already processed" indicator helps a network proxy to determine whether to act on a data stream. (Col. 8, lines 41-53)

Claims 8 and 56, and 9 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mogul. The Applicant respectfully traverses the rejection of these claims. Claims 8 and 9 are rejected since the Mogul reference discusses the use of a plurality of parameters in his proxy, suggesting multiple processes being applied to a data stream. And Mogul uses one prosecution execution server and by extension the system is indicated as being extended to using multiple proxy execution environment

servers in the same way. However, the present invention provides proxy modules retrieved from Proxy Repositories for supplying a combination of proxy functions to operate on a data stream. These claims describe sending a request to each proxy execution environment server for each server to install a proxy in the proxy path (claim 9). The subject claims depend from amended independent claims 1 and 17 and the subject claims do not supply the missing proxy chain and the proxy cradle of the Applicant's invention. For these reasons the Applicant respectfully requests the withdrawal of the rejection of these claims.

Claims 11, 58 and 23 and 16 and 60 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mogul, as applied above, in view of Knauerhase. The Applicant respectfully traverses the rejection of these claims.

Knauerhase is cited for disclosing the port operation that supports TCP based data streams. However, Knauerhase fails to disclose a proxy cradle associated with the proxy chain and service points in the proxy path. Therefore, the Applicant respectfully requests withdrawal of the rejection of these claims.

Claims 10, 12-15, 57 and 59 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Mogul in view of Knauerhase, as applied above, in view of Smith et al. (US Patent Number 6,377,901), hereinafter referred to as Smith. The Applicant respectfully traverses the rejection of these claims.

The Smith reference is cited for sending requests in parallel. Smith discloses a proxy server array where communications with each proxy server can occur in parallel. However, the Applicant's proxy execution environment servers are different from the proxy servers of Smith. The proxy execution environment servers retrieve selected proxies from Proxy Repositories for installation in a proxy path. This is different from hosting a proxy on a server. Further, claims 10, 12-15, and 57-59 depend directly or indirectly from amended independent claims 1 and 17 and contain the same limitation of a proxy cradle which is not found in the Mogul, Knauerhase or Smith references. The Applicant respectfully requests the withdrawal of the rejection of these claims.

Claims 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mogul, in view of Knauerhase, as applied above, further in view of Smith. The Applicant respectfully traverses the rejection of these claims.

The combination of Mogul and Knauerhase is cited for disclosing a method for transcoding information returned by a server to a client at a proxy server or a plurality of proxy servers that support TCP-based port operations. The Smith reference is cited for disclosing data retrieval operations between clients and proxy servers that utilize a dynamically changing distributed cache, with each proxy server occurring in parallel. The argument is that Smith modifies the Mogul system by adding the ability to complete proxy installation and parallel proxy server communications. The difference between the present application and the combination of Mogul, Sridhar and Smith is that the Applicant's invention provides for concatenating proxies into proxy chains that may come from different proxy execution environment servers. The proxy chains are installed in a proxy path between the server and the application and include a proxy cradle for enhancing proxy-to-proxy communications. Therefore, the Applicant respectfully requests the withdrawal of the rejection of these claims.

Prior Art Not Relied Upon

In paragraph 19 on page 10 of the Office Action, the Examiner stated that the prior art made of record and not relied upon is considered pertinent to the Applicant's disclosure.

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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